

## Abstract

The present invention provides a sensor element having a sensor substrate and a sensing portion supported by the sensor substrate in which a resin film is provided between the sensor substrate and the sensing portion. The resin film has a high heat resistance to the temperature at the fabrication process and for the use of sensor element, has an excellent coverage performance of an undercoat having a three-dimensional structure, can be made its surface flat, has a low stress applied to the sensing portion, can be formed at low temperature and can prevent the sensing portion from being adversely affected in the fabrication process.